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U. S. FOREST SERVICE

Pacific Northwest Research Note

FOREST AND RANGE EXPERIMENT STATION · U.S. DEPARTMENT OF AGRICULTURE · PORTLAND, OREGON

PNW-26 July 1965

WILDERNESS LAND ALLOCATION IN A MULTIPLE USE FOREST MANAGEMENT FRAMEWORK IN THE PACIFIC NORTHWEST

by

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INTRODUCTION

Since the early 1920's, public forest-land managers in the United States (particularly, those responsible for the administration of the National Forests) have been wrestling with a difficult problem of land use decision making. This problem is contained in the question: Why and how should particular tracts of land be allocated to a special kind of recreation use category called "wilderness"? Even though no "formula" has yet been found to answer this question, many allocation decisions have been made, resulting in a "wilderness system"[1/] on the National Forests of the United States of over 14.5 million acres. A little more than 14 percent of this acreage is on the National Forests of Oregon and Washington.

Many of these decisions have aroused nationwide controversies. More such decisions are yet to be made. Even if there were no more decisions of this kind to make, a close examination of the question yields results useful to public forest-land managers who must choose among competing

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1/ Includes wilderness areas, as defined by the 1964 Wilderness Act (78 Stat. 890; P.L. 88-577), and primitive areas.

uses for particular tracts of public land. Such decisions are becoming more frequent and more difficult. This report highlights a recent study[2/] of this land allocation problem.

STUDY FRAMEWORK AND OBJECTIVES

Although this study examined and classified all the various historical concepts of wilderness, it was concerned mainly with "institutionalized wilderness," which was defined as an area having:

1. Been designated as wilderness with the purpose of maintaining its wildernesslike character;
2. A definite name which associates it in the minds of administrators and others with a definite location;
3. Definite boundaries, usually known on the ground by local residents and visitors and capable of being identified on a map;
4. Some direct or indirect legal authority for designation and enforcement of management provisions;
5. A definite plan or philosophy for its management.

The method used for this study involved three general stages: (1) an examination of wilderness and land use ideologies and concepts, with the objective of organizing viewpoints and identifying kinds of criteria and how they were used; (2) a detailed examination and appraisal of selected Forest Service wilderness classification cases in the Pacific Northwest Region to see how past decisions had been made and what the bases for decision were; and (3) particular consideration of economics analysis as a tool for measuring relevant facts and making choices among alternative land uses.

SOME RESULTS

American wilderness and its literature make up a colorful "safari land" for those who wish to hunt their quarry with the special weapons of a wide range of disciplines. Psychiatrists explore the therapeutic values to users; political scientists search for the strategies of opponents in particular conflicts; sociologists test behavioral models of man on the wilderness user; ecologists use the wilderness as a norm for observing biological succession; economists measure the economic impact of wilderness classification; philosophers muse upon the value of wilderness solitude; etc.

2/ Hughes, Jay M. Wilderness land allocation in a multiple use forest management framework in the Pacific Northwest. 1964. (Unpublished Ph. D. thesis on file Mich. State Univ., East Lansing. 597 pp., illus.)

An exhaustive examination of American wilderness literature identified 15 recurring issues and themes, which underscore the interdisciplinary nature of the general subject. These were classified and briefly characterized as follows:

1. Anthropocentricity--a concept stressing the man-centeredness of wilderness.
2. Public access to decision making--raising the questions of how and where the "public" may participate in the decision-making processes of a bureaucracy.
3. Minority rights--a justification for wilderness in view of the relative few who use wilderness.
4. Vicarious use--also a justification for wilderness since many who don't use wilderness like to know it exists.
5. The negligibility argument--a line of reasoning which contrasts economic with noneconomic values and contends economic values are negligible.
6. Intrarecreation conflict--different categories of recreationists come into conflict in particular places, and this creates a major problem to be solved.
7. Protection by legislation--reflecting concern for maximum assurance of permanence.
8. Multiple use or single use--which is wilderness?
9. Freedom of choice--wilderness widens the range of recreation experience possibilities.
10. Conservation ethics--a kind of moralistic attitude based upon the idea that wilderness is valuable to man and will become more precious.
11. Sanctuary, sanity, and health--stresses the therapeutic values of the wilderness experience.
12. Science and the control-plot idea--wilderness is seen as a standard of reference for biological change in nonwilderness environments.
13. Local and national interests--which should predominate when these conflict?
14. Wilderness use capacity--the big unknown.
15. Size, location, and configuration of area--variables which influence the productivity of wilderness satisfaction.

Examination of past classification cases, as well as the literature, reveals the need to clarify the choices that are to be made and to make explicit the contributing factors to the decisions. The true nature of the choice is that decisions are made between land use alternatives, using economic and noneconomic values together, rather than between dollar and nondollar value alternatives. Under the logic of choice of economics, we would choose that alternative which maximizes the economic where noneconomic values are equal or that which maximizes the noneconomic where economic values are equal. However, these rules of choice are inadequate where a choice must be made between land use alternatives when neither economic nor noneconomic consequences are equal.

Economics analysis does not provide the complete basis for choice. However, a number of economics methodologies are very useful, maybe indispensable, in this decision-making problem. Several recreation valuation methods were critiqued. They may be classified as follows:

1. Location or spatial differentiation analysis.
2. Precedential valuation--relative valuation based on precedent.
3. Market value of recreation.
4. User expenditures.
5. Cost of development and operation.
6. National income and product accounting.
7. Economic base study approach.

The valuation of recreation is but one part of decision making. A framework is needed in which to use all the economic and noneconomic values.

Four economics choice mechanisms were thus examined for their relevance to the wilderness land allocation decision. These are called:

1. Benefit-cost analysis.
2. Budgeting.
3. Least-opportunity-cost ranking.
4. Joint production analysis.

It was concluded that all of these methodologies encouraged more explicit economic consequences of wilderness allocation. The historical record of wilderness discussions and decisions revealed that methodologies such as the national income, economic base, and budgeting techniques seemed to be favored. However, the overall study conclusion was that all methods proved deficient in terms of providing a theoretically complete valuation of the alternatives, wilderness versus non-wilderness.

Finally, some of the economic consequences of allocating land to institutionalized wilderness status in the Pacific Northwest were estimated. For example, a principal land use alternative to wilderness in the Pacific Northwest is timber production. Using a value-added approach, to obtain an ultimate market "impact" measure of using present timbered wilderness areas for timber production or wilderness recreation, gave a ratio of over 17:1 in favor of timber production. However, this is not interpreted to mean that there has been a misallocation of resources, but simply that society has been willing to pay this "price" to have the wilderness thus far established.